

What is claimed is:

1. A radome comprising:
 - a first skin portion;
 - 5 a first core portion formed over one side surface of the first skin portion;
 - a high relative-dielectric-constant layer formed over the side surface of the first core portion which is opposite the first skin portion;
 - 10 a second core portion formed over the side surface of the high relative-dielectric-constant layer which is opposite the first core portion; and
 - a second skin portion formed over the side surface of the second core portion which is opposite the high relative-dielectric-constant layer,
 - 15 wherein the high relative-dielectric-constant layer has a relative dielectric constant that is more than the relative dielectric constants of the skin part consisting of the first skin portion and the second skin portion and also of the core part consisting of the first core portion and the second core portion.

2. The radome according to Claim 1, wherein the difference in relative dielectric constant between the skin part consisting of the first skin portion and the second skin portion and the core part consisting of the first core portion and the second core portion is 1.5 or less, and the relative dielectric constant of the high relative-dielectric-constant layer is 4-20.

- 30 3. The radome according to Claim 1, wherein the difference

in relative dielectric constant between the skin part consisting of the first skin portion and the second skin portion and the core part consisting of the first core portion and the second core portion is more than 1.5, and the relative dielectric constant of the high relative-dielectric constant layer is 10-55.

4. The radome according to Claim 1, wherein one at least of the skin part consisting of the first skin portion and the second skin portion, the core part consisting of the first core portion and the second core portion, and the high relative-dielectric-constant layer includes at least one that is selected from the group consisting of BaTiO₃, CaTiO₃, MgTiO₃, SrTiO₃, (Zr, Sn)TiO₄, BaTi₄O₉, Ba₂Ti₉O₂₀, (Mg, Ca)TiO₃, Ba(Zr, Ti)O₃, Ba(Mg, Ta)O₃, Ba(Zn, Ta)O₃, BaTiO₄, WO₃, TiO₂, Bi₄Ti₃O₁₂, BaZrO₃, 15 CaSnO₃, alumina, and silicon.